

U.S. EPA Science Advisory Board

Integrated Human Exposure Committee

FY 2004 Member Biosketches

Integrated Human Exposure Committee

Buckley, Timothy

Johns Hopkins University

Dr. Timothy J. Buckley is an Assistant Professor of Environmental Health Sciences and Epidemiology at the Johns Hopkins Bloomberg School of Public Health. Dr. Buckley joined the Hopkins faculty in 1996 after five years with the U.S. EPA's National Exposure Research Lab. His research has focused on assessing total human environmental exposure through measurements in multiple environmental media and biomarkers. Over his research career, Dr. Buckley has been responsible for the concept, design, implementation, and management of several major studies involving human exposure to PAHs, metals, VOCs, pesticides, and PCBs through multiple environmental media. These large-scale projects complement laboratory-based studies where controlled exposures are used to more fully investigate relationships between exposure, body burden, and effects. Dr. Buckley's current research includes community-based exposure assessment, evaluation of chemical treatment to reduce lead bioavailability, the role of exposure to indoor air pollution and allergens in asthma among inner-city children, exposure and effects from mobile source related air pollution, improving methods to assess dermal exposure, and the development and evaluation of exposure biomarkers. While with the U.S. EPA, Dr. Buckley received awards for his role and efforts in the National Human Exposure Assessment Survey (NHEXAS) and the Lower Rio Grande Environmental Exposure Study. His published research was recognized in 1996 with a U.S. EPA Scientific and Technology Achievement Award and again in 1999 by the Walter G. Berl Award given the Johns Hopkins Applied Physics Laboratory. Dr. Buckley is a certified industrial hygienist and has been elected to leadership positions among his professional associations including chair of the American Industrial Hygiene Association's Biological Monitoring Committee and Academic Counselor of the International Society of Exposure Analysis. Dr. Buckley received his Ph.D. in Environmental Science from Rutgers University and a Masters of Health Science in Industrial Hygiene from the Johns Hopkins Bloomberg School of Public Health.

Fenske, Richard

University of Washington

Richard A. Fenske is Professor of Environmental and Occupational Health Sciences at the University of Washington and director of the NIOSH-supported Pacific Northwest Agricultural Safety and Health Center since its establishment in 1996. He also serves as Deputy Director of the EPA/NIEHS-supported UW Center for Child Environmental Health Risks Research, and is a core faculty member of the NIEHS-supported Center for Ecogenetics and Environmental Health. Dr. Fenske has developed an international reputation in occupational skin exposure and agricultural hygiene. He developed the video imaging technique for assessing exposure (VITAE system), a method that allows visualization and quantification of dermal exposure to hazardous chemicals. The VITAE system has been adopted by occupational health research laboratories in the United Kingdom, The Netherlands and Canada, as well as at the NIOSH-sponsored Great Plains Center for Agricultural Health, University of Iowa. He continues to maintain an active program of research and publication in this field. His work over the last several years has focused on children's exposure to pesticides in agricultural communities. Dr. Fenske serves on the National Advisory Panel of the National Cancer Institute's Agricultural Health Study, a prospective epidemiological study of pesticide applicators and their families that involves researchers from U.S. EPA and NIEHS. In 2002 Dr. Fenske was appointed to the National Academy of Sciences/Institute of Medicine Committee to Review the Health Effects in Vietnam Veterans of Exposure to Herbicides. He served as a member of the Agriculture Committee of the American Conference of Governmental Industrial Hygienists from 1993-2000. Dr. Fenske has provided testimony to the U.S. Senate Subcommittee on Toxic Substances, Environmental Oversight, Research and Development regarding children's exposure to pesticides. He was an invited speaker at the Surgeon General's Conference on Agricultural Safety and Health in 1991, and also served as an Outside Reviewer for the initial NIOSH sponsored Farm Family Health Hazard Surveillance proposals. He served on the NIOSH National Occupational Research Agenda (NORA) Allergic and Irritant Dermatitis team from 1997-2002. From 1984-1990 Dr. Fenske was Assistant Professor and then Associate Professor of Environmental Sciences at Rutgers University. Prior to this position, he received his doctoral degree and the Master of Public Health degree from UC Berkeley in Environmental Health Sciences. He earned a bachelor's degree in history from Stanford University.

Fuentes, Montserrat

North Carolina State University

Dr. Montserrat Fuentes is an associate professor in the Statistics Department at North Carolina State University and a visiting faculty in the Center on Global Change at Duke University. She also holds an associate status in the Marine Earth Atmospheric Sciences Department at NCSU. Dr. Fuentes received her B.S. in Mathematics and also in Music from the University of Valladolid (Spain), and her Ph.D. in Statistics from the University of Chicago (1999). She spent 6 months as a post doc in the National Center of Atmospheric Research (NCAR) before joining NC State in 1999. Throughout her professional career, Dr. Fuentes has been active in numerous professional societies, including being chair of the section on Statistics and the Environment (2003) for the Eastern North American Region (ENAR) of the International Biometric Society, chair of the General Methodology Section (2001, and 2004) of the American Statistical Association (ASA), program chair for the 2002 Southern Regional Council on Statistics (SRCOS) and ASA, serving in the scientific committee for The International Environmetrics Society (TIES) (2004) and in the program committee for the Institute of Mathematical Science-The International Society for Bayesian Analysis (IMS-ISBA) joint conference (2005). She was also chair of the scientific committee for the International Statistical Institute (ISI) Conference on Environmental Statistics and Health (July, 2003). She is a member-elect of the ISI, and also member of the Regional Advisory Board (RAB) for ENAR (2003-2006). Dr. Fuentes is an associate editor for the Journal Biometrics (2003-2006). She received the Abdel El-Shaarawi Young Research's Award in recognition of outstanding contributions to environmetric research (2003). Dr. Fuentes has maintained her own research group, currently with eight Ph.D. graduate students working on projects sponsored by the National Science Foundation (NSF), the US Environmental Protection Agency (EPA), the US Department of Transportation (DOT), the National Oceanic and Atmospheric Administration (NOAA) and the US Department of Defense (DOD). Dr. Fuentes has developed new statistical methods that she applied to air pollution and weather prediction problems in collaboration with the air quality modelers and scientists at EPA and NCAR. This work has led to numerous publications in top statistical journals and books, as well as top journals in atmospheric sciences. Her current research focuses on the development of novel spatial-temporal statistical methodology to quantify uncertainties about the impacts of fine particles exposure on mortality and illness.

Guisseppi-Elie, Annette

DuPont Engineering

Dr. Guisseppi-Elie is a Senior Consultant on Exposure and Risk Assessment issues for the DuPont Company. She has served on a number of scientific entities in her role as technical expert and advocate for the use of sound scientific principles and data in conducting environmental health risk assessments. These organizations include the USEPA Science Advisory Board, the Mickey Leland Center National Urban Air Toxics Research Center, the International Programme on Chemical Safety's Planning Committee on Harmonization of Exposure Assessment and the American Chemistry Council's Human Health Exposure Assessment Technical Implementation Panel. She is past-Chair of the American Industrial Health Council's Environmental Health Risk Assessment Committee. Her expertise is in the areas of site and risk assessment, specifically, exposure assessments and including environmental fate and transport processes. Dr. Guisseppi-Elie has conducted environmental site assessments and risk assessments both in the US and internationally. Her doctoral research focused on the fate and transport of dioxins in the environment. Her current research interests are in the areas of integrated/cumulative exposure and risk assessment and the relationship between indoor, outdoor and personal air exposures (e.g., the World Trade Center Indoor Air Assessment). Dr. Guisseppi-Elie received her B. Sc degree in Chemistry and Zoology and her M. Sc. in Entomology from the University of the West Indies (UWI), Trinidad in 1977 and 1979, respectively. She received a M. Sc degree in Pollution and Environmental Control from the University of Manchester Institute of Science and Technology (England) in 1980 and her Ph. D. in Civil Engineering from the University of Maryland (College Park, USA) in 1987.

Jones, Lovell

University of Texas, M.D. Anderson Cancer Center

Dr. Lovell Allan Jones is presently a Professor in the Departments of Gynecologic Oncology and Biochemistry & Molecular Biology at the University of Texas M.D. Anderson Cancer Center (UTMDACC). Since 1988, he has served as Director of the Experimental Gynecology/Endocrinology. In January 2000, he was named as the first Director of the Congressionally Mandated Center for Research on Minority Health. Since 1982, Dr. Jones has been a member of the graduate faculty at the University of Texas Graduate School for Biomedical Sciences. He has had 62 students and/or fellows train in his laboratory, ranging from high school students to clinical fellows. Dr. Jones has published over 100 scientific articles ranging from hormonal carcinogenesis to health policy. During his career, Dr. Jones has received research support from NIH, Rockwell Foundation, the Walton Foundation, Kellogg Company, American Health Foundation as well as Exxon Company. Since 1980, Dr. Jones has received over \$10,000,000 direct cost research funding in which he was the Principal Investigator. As a scientist, Dr. Jones has done extensive research into the relationship between hormones, diet and endocrine responsive tumors. His present work involves determining the mechanism by which natural and environmental estrogenic agents may initiate cancers in hormonally responsive tissue. Dr. Jones is presently a Principal Investigator on three NIH grants, one entitled The Women's Health Eating and Living (WHEL) Study; a grant studying the role of diet on prevention recurrence of second primaries in breast cancer survivors. Dr. Jones is a member of the American Association for Cancer Research, the Endocrine Society, the International Association for Breast Cancer Research, the American Society of Zoologist, the American Association for the Advancement of Science, the New York Academy of Science, Sigma Xi, the Society for the Study of Reproduction, and the International Society for Comparative Oncology. In 1992, Dr. Jones served as a member of the Clinical Research Panel of the National Task Force on the NIH Strategic Plan. For his work in the area of Cancer Prevention, Dr. Jones was selected as the 1996 recipient of the UTMD Anderson Faculty Achievement Award in Cancer Prevention. In addition, he is a member of Sigma Xi's 62nd College of Distinguished Lecturers. Dr. Jones was also awarded the Legacy of Leadership Award by Howard University Hospital and honored on the floor of the U.S. House of Representatives by Congressman Kenneth Bentsen for his work addressing the health issues of the underserved. Most recently, Dr. Jones was awarded the American Cancer Society's Humanitarian Award. Dr. Jones received his doctorate in 1977 in the field of zoology with an emphasis in endocrinology and tumor biology from the University of California, Berkeley.

Lucier, George W.

Private Consultant

Dr George W. Lucier is an environmental consultant with emphasis on toxicology, exposure assessment and risk assessment models which integrate diverse data sets. Dr Lucier retired from the NIEHS in 2000, where he served as Director of the Environmental Toxicology Program, Associate Director of the National Toxicology Program, Head of the research group on molecular toxicology and epidemiology and co-editor of Environmental Health Perspectives. He continues to serve as Chair of the Scientific Advisory Board for the regulation of hazardous air pollutants for North Carolina. This board conducts risk assessments and recommends safe exposure levels of air pollutants. Dr Lucier is a scientific advisor to the NIEHS, NTP, WHO and is the public health expert on the North Carolina based s Steering Committee for the development of environmentally-superior technologies for handling hog wastes. Dr Lucier is a Senior Adjunct Toxicologist with Environmental Defense. Dr Lucier received his Ph.D from the University of Maryland School of Agriculture in 1965. During his career he has published over 200 articles in the peer-reviewed scientific literature, chaired dozens of scientific conferences and workshops including IARC working groups, workshops on biologically-based models for human risk assessments and exposure assessment, and conferences on herbal medicines and endocrine disrupters. He played a key role on numerous advisory boards and interagency activities including chairing a White House Committee charged with reaching agreement among various agencies on risk assessments for methyl mercury. His research on mechanisms of action for dioxin, hormonally-active chemicals and risk assessment models is widely recognized and it has led to several awards. Dr Lucier led much of the effort to incorporate mechanistic studies into toxicological evaluations of the NTP including the development and validation of alternative models. He also developed processes for NTP review that were scientifically-rigorous, open and responsive to the concerns of various stakeholders.

Maddalena, Randy

Lawrence Berkeley National Laboratory

Randy Maddalena, Ph.D., is a Scientist in the Exposure and Risk Analysis Group within the Environmental Energy Technologies Division at Lawrence Berkeley National Laboratory. He received his BS in Environmental Toxicology (1992) and his Ph.D. in Agricultural and Environmental Chemistry (1998) from the University of California, Davis. The primary focus of his research is development, evaluation and application of models that predict chemical fate in multiple environmental media (air, water, soil, vegetation, sediment) and chemical exposures through multiple pathways (drinking water, food, feed, indoor air) for both human and ecological receptors. He also develops tools and methods for performing probabilistic risk assessment and sensitivity analysis applied to complex regulatory models. His most recent work combines the use of models and experimental data to investigate how vegetation influences the environmental fate and transport of semivolatile organic pollutants and how the uptake of these pollutants into ecological or agricultural food chains might contribute to dietary exposures. Dr. Maddalena is a Co-chair of the Society of Environmental Toxicology and Chemistry (SETAC) Advisory Group on Fate and Exposure Modeling where he serves as an Editor of the Fate and Exposure Modeling column in the SETAC Globe. He is also a member of the International Society of Exposure Analysis and a member of the SAB's Integrated Human Exposure Committee. He receives funding from the EPA's National Exposure Research Lab for research on fate and exposure models; the DOE's Fossil Energy Program for experimental work on plant uptake of petroleum related hydrocarbons; and from the EPA's Office of Air Quality Planning and Standards for his work on the TRIM.FaTE model. Dr. Maddalena also recently completed a project funded by the EPA's Office of Emergency and Remedial Response where he developed an approach for constructing inputs to probabilistic risk assessment models.

Miller, Mark

Office of Environmental Health Hazard Assessment (OEHHA)

Dr. Mark Miller has appointments as Assistant Clinical Professor in the departments of Pediatrics and Occupational and Environmental Medicine at the University of California San Francisco. He currently serves as the director of the University of California San Francisco-Pediatric Environmental Health Specialty Unit (PEHSU) and as a public health medical officer for the California EPA Office of Environmental Health Hazard Assessment, Air Pollution Toxicology and Epidemiology Section (CA EPA). He holds an MD degree from Michigan State University College of Human Medicine and completed his pediatric residency there. He has a MPH in environmental health sciences from the School of Public Health at U.C. Berkeley and completed a residency in preventive medicine with the California Department of Health Services. Dr. Miller spent more than 13 years as a pediatrician in private practice in California. At the California EPA, Dr. Miller is working on developing risk assessment methodology that addresses the unique vulnerabilities of children. In addition, he evaluates chemical-specific epidemiology and toxicology literature for Cal/EPA for use in health effects assessments for air pollutants. Most recently he has edited a review of the health effects of environmental tobacco smoke for the California Toxic Air Contaminant listing process. He is a Fellow of the American Academy of Pediatrics (AAP) and co-chair of California Chapter 1, American Academy of Pediatrics (AAP) Environmental Health Committee. In addition, he is a former member of the AAP National Committee on Environmental Health. Dr. Miller has served as a member of advisory committees and expert panels in the area of pediatric environmental health for the state of California and federal agencies, including the "Center for Evaluation of Risks to Human Reproduction" Expert Panel on Methanol and the USEPA/USDA Pesticide Tolerance Reassessment Advisory Committee. He is currently active in international environmental issues and serves on the Commission for Environmental Cooperation Lindane Action Plan Task Force. Dr. Miller's work with the University of California PEHSU is funded by grants from the Agency for Toxic Substances and Disease Registry (ATSDR) and US Environmental Protection Agency administered by the Association of Occupational and Environmental Clinics. His articles on pediatric environmental health issues have appeared in such publications as Pediatrics, the International Journal of Toxicology, and the Handbook of Pediatric Environmental Health (published by the American Academy of Pediatrics).

Morandi, Maria

University of Texas - Houston Health Science Center

Dr. Maria Morandi is an assistant professor of Environmental Sciences and Occupational Health at the School of Public Health of the University of Texas at Houston. She holds a BS degree in Chemistry from the City College of New York (1978), and MS (1981) and Ph.D. (1985) degrees in Environmental Sciences from the Norton Nelson Institute of Environmental Medicine of New York University. Dr. Morandi is also certified in Industrial Hygiene (CIH) by the American Board of Industrial Hygiene. Dr. Morandi's areas of expertise include assessment of indoor, outdoor and personal air concentrations of airborne contaminants in community and occupational environments, development of methods for personal exposure monitoring of gas and particle-phase airborne chemicals, evaluation of the effects from exposure to airborne particles and ozone on human and murine alveolar macrophages, and effects from exposure to airborne particles, ozone, and air toxics in children with asthma. She has also performed statistical modeling of PM source contributions. Dr. Morandi served as a member of the Integrated Human Exposure Assessment Committee (formerly the Indoor Air and Total Human Exposure Assessment Committee) of the EPA Science Advisory Board from 1992 and 1998, and has agreed to serve again in this Committee starting in 2003. She was as member of the Research Strategies Advisory Committee between 1998 and 2003. Dr. Morandi has also served as member or chair of several EPA program review panels, the Agency for Toxic Substances Board of Scientific Counselors, and the National Institute of Occupational Health Study Section. Currently, she is a member of the Board of Scientific Counselors (BOSC) of the National Toxicology Program (NIEHS.), and the Chemical Exposures Working Group for the National Children Study (NCS). Dr. Morandi's sources of recent grant and/or other contract support funding include: (1) U.S. Environmental Protection Agency (several contracts on the use of passive dosimeters for monitoring indoor, outdoor and personal air concentrations of air toxics; a STAR grant on the effect of PM on murine and human alveolar macrophages; and an evaluation of the impact of attached garages on indoor and personal air concentrations of VOCs); (2) the Mickey Leland National Urban Air Toxics Research Center (impact of exposure to airborne carbonyls, PM and ozone on children with asthma); (3) The Health Effects Institute (HEI) (a population-based exposure study); and (4) NIOSH (for training Industrial Hygienists).

Parkin, Rebecca Chair

The George Washington University

Rebecca T. Parkin is an Associate Research Professor in the Department of Environmental and Occupational Health with a joint appointment in the Department of Epidemiology and Biostatistics in the School of Public Health and Health Services at The George Washington University Medical Center. Also, she is the Scientific Director of the Center for Risk Science and Public Health at the University. Previously Dr. Parkin was director of Scientific, Professional and Section Affairs at the American Public Health Association; the assistant commissioner of the Division of Occupational and Environmental Health at the New Jersey Department of Health; and an environmental epidemiologist at the Centers for Disease Control. Her areas of expertise include environmental epidemiology, public health policy, vaccine risk/benefit communication, and environmental health risk assessment and communication. Recently her work has been supported by the U.S. Environmental Protection Agency; Cadmus the American Water Works Association Research Foundation; the U.S. Departments of Defense, Veterans Affairs, and Health and Human Services; Montgomery County (MD) Department of Health and Human Services; and the Association of Occupational and Environmental Clinics. She has been a member of the National Research Council's (NRC's) Water Science and Technology Board; and has served on committees of the NRC's Board of Environmental Science and Technology, the Institute of Medicine, U.S. Environmental Protection Agency, Dept. of Health and Human Services, and Agency for Toxic Substances and Disease Registry. Additionally, she has represented U.S. public health scientists through invitation to speak at international forums and workshops hosted by the National Academy of Sciences, and professional societies and institutions. Throughout her career, she has served as a site visitor for the Council on Education for Public Health, and as a peer reviewer for several professional journals focused on environmental health. Dr. Parkin received her A.B. in sociology from Cornell University; M.P.H. in environmental health and Ph.D. in epidemiology from Yale University; and Certificate in Science, Technology, and Policy from Princeton University. She has been honored by Yale University as a Distinguished Alumna for her extensive public service.

Waldman, Jed M.

California Department of Health Services

Dr. Jed Waldman heads the Indoor Air Quality Program of the California Department of Health Services in Berkeley. His group is responsible for research, training and public outreach on the full range of IAQ issues, including building design and ventilation, volatile organic compounds, asbestos, bioaerosols, and environmental tobacco smoke. His group has received extramural funding from U.S. EPA, CDC, OSHA, State of California agencies, and the Tobacco-related Disease Research Program (tobacco tax funds administered by the University of California). Dr. Waldman chairs of the California Interagency Working Group on Indoor Air Quality and heads their work group on indoor environmental quality in schools. He has served on advisory panels for the U.S. EPA, Health Effects Institute, the American Lung Association, and the Environmental Law Institute, and he currently serves on U.S. EPA's Science Advisory Board's Integrated Human Exposure Committee. He served on the International Society of Exposure Analyses' Board of Councilors, 1999-2002 and he is currently the chair of the ISEA's Publications Committee. Dr. Waldman has a B.S. in Environmental Engineering from the University of Florida, and a M.S. in Environmental Engineering Science, and a Ph.D. related to atmospheric chemistry from the California Institute of Technology in Pasadena. From 1986-95, he was an assistant, then associate professor of Environmental & Community Medicine at Robert Wood Johnson Medical School in Piscataway, New Jersey. His research and teaching activities focused on human exposure measurement and assessment, and he received funding from U.S. EPA, NIEHS, and State of New Jersey agencies.

Wallinga, David

Institute for Agriculture and Trade Policy

David Wallinga, M.D., MPA is a physician, and has been Senior Scientist and Co-director of the Food and Health Program at the non-profit Institute for Agriculture and Trade Policy (IATP), in Minneapolis since September 2000. Previously, he worked for 3 years as Senior Scientist in the Public Health program of the Natural Resources Defense Council in Washington, D.C. Dr. Wallinga holds a medical degree from the University of Minnesota, a Masters in Public Affairs from Princeton University, and a B.A. from Dartmouth College. His areas of expertise include risk assessment and regulation of toxic chemicals including pesticides; food and drinking water routes of exposure to toxic chemicals; health impacts of pesticides and other neurodevelopmental toxicants on fetuses and children; agricultural antibiotics and their contribution to antimicrobial resistance; and the application of the precautionary principle in regulation. He is author of Poultry on Antibiotics: Hazards to Human Health; Putting Children First: Making Pesticide Levels in Food Safer for Infants & Children, co-author of several journal articles on pesticide regulation as it pertains to children's health, and a contributing author to In Harm's Way: Toxic Threats to Child Development. Dr. Wallinga serves on the Integrated Human Exposure Committee of the EPA Science Advisory Board, is a board member of the Science Environment Health Network, and is a Governing Council for the American Public Health Association where he is a member of the Environment Section. He also serves on the Minnesota Medical Association's Environment Committee. In 1995-96, he was granted a Science Diplomacy Fellowship at the U.S. Agency for International Development by the American Association for the Advancement of Science. Dr. Wallinga previously worked as a consultant and health economist to the World Health Organization and the World Bank.

Weschler, Charles J.

University of Medicine and Dentistry of New Jersey

Dr. Charles J. Weschler is currently a Professor in the Indoor Environment and Energy Centre at the Technical University of Denmark, an Adjunct Professor in the Department of Environmental and Community Medicine, University of Medicine and Dentistry of New Jersey (UMDNJ)/Robert Wood Johnson Medical School, and a member of the Environmental and Occupational Health Sciences Institute, UMDNJ & Rutgers University. Dr. Weschler received the B.S. in Chemistry from Boston College in 1969, the M.S. and Ph.D. degrees in Chemistry from the University of Chicago in 1971 and 1974 and was a Postdoctoral Fellow with Prof. F. Basolo at Northwestern University. He joined Bell Laboratories in 1975 and worked as a research scientist in the former Bell System Laboratories (Bell Labs/Bellcore/Telcordia Technologies) before joining the faculty of UMDNJ/Rutgers and the Technical University of Denmark in 2001. He was a Visiting Scientist in the Indoor Environment Program at Lawrence Berkeley National Laboratory in 1991, named a "Distinguished Member of Technical Staff" at Bellcore in 1986, and was elected to the International Academy of Indoor Air Sciences in 1999. His research has focused on the chemicals present in indoor environments, reactions among these chemicals, highly reactive and short-lived indoor species, the formation and fate of secondary organic aerosols in indoor environments, indoor/outdoor relationships for vapor and condensed phase species, factors influencing the concentrations, transport and surface accumulations of indoor pollutants, and indoor contributions to total pollutant exposures. He is a member of numerous professional societies, has served (2000-2003) as Treasurer and on the Board of Directors for the International Society of Indoor Air Quality and Climate (ISIAQ), has served on 4 committees for the National Academy of Sciences, is a member of the NORA Indoor Environment Team for the National Institute of Occupational Safety and Health, and is currently a member of the US EPA Science Advisory Board. He is Associate Editor/Chemistry for the journal Indoor Air, on the Editorial Advisory Board for Atmospheric Environment, and was a co-guest editor for the special 2003 issue of Atmospheric Environment on Indoor Air Chemistry and Physics. Sources of recent grant and contract support are the International Centre for Indoor Environment and Energy at the Technical University of Denmark for sensory studies of indoor pollutants, the California Air Resources Board for a project on cleaning products and air fresheners, and the Department of Defense for a project on products produced during chemical disinfection of buildings.